

NEW NORTH AMERICAN SPIDERS AND MITES.

BY NATHAN BANKS.

OONOPIDÆ.

But one species of this family has been described from our country, *Orchestina saltitans* Bks., a soft-bodied form. I now take pleasure in adding another species of the hard-bodied section.

Gamasonomorpha floridana nov. sp.—Length 2. mm. Reddish yellow, legs paler yellowish; cephalothorax once and a third as long as broad, narrow in front, surface punctulate except in median region, which is bounded by a row of bristles, quite high in second third, convexly sloping to low clypeus, abrupt behind; a. m. e. touching the slightly smaller p. s. e.; p. m. e. larger, touching, but well separated from s. e.; posterior row distinctly recurved; mandibles vertical, with a swelling on the front near base; maxillæ inclined over the short lip; sternum a little longer than broad, broadly truncate between hind coxæ, punctulate, a bristle arising from each puncture; legs moderate, femora thickened at base, no spines. Abdomen elliptical, once and a half as long as broad, wholly covered above by a horny shield, and a large one on the venter from base to near spinnerets, a circle at base of spinnerets, shields punctulate, each puncture giving rise to a hair, ventral shield divided at lung-slits, and in the anterior portion are two oblong red marks.

Two specimens from Punta Gorda, Fla. (Mrs. Slosson).

PHOLCIDÆ.

PHOLCOPHORA nov. gen.

Group of Pholecæ. Eight eyes; posterior row moderately recurved, of about equal size, the m. e. their diameter apart, almost touching the s. e.; anterior row procurved, the m. e. but little smaller than the s. e., nearly contiguous, and but little farther from either the a. s. e. or the p. m. e., but a trifle nearer to the former; cephalothorax broad, impressed, the pars cephalica slightly elevated and rounded, eyes not on an elevation.

Closely related to *Physocylus*, but in that genus the posterior row of eyes is straight, and the a. m. e. several times nearer to the a. s. e. than to the p. m. e.

Pholcophora americana nov. sp.—Length 2.2 mm., femur i 1.8 mm. Cephalothorax pale yellowish, darker on head, black spots around eyes; sternum and legs pale dirty yellowish. Abdomen pale beneath, dark gray above; everywhere with scattered granules, but most numerous on the abdomen, each giving

rise to a large, stiff, curved bristle; cephalothorax as long as broad, rounded, low, head elevated, clypeus high and concave, eyes large and close together; mandibles moderately large, in ♂ with a down-curved spine from inner edge of base, the two, as seen from above, close together and not diverging. Legs long and slender, metatarsus i about three times as long as tarsus i; sternum as broad as long, sides rounded, broadly rounded behind, in the ♂ there is a conical hump on each anterior corner. Abdomen higher than long, somewhat compressed; region of epigynum swollen, a large brown plate, concave behind and each side extending backward to the furrow. The ♂ palpus with the femur swollen at tip; the patella short; the tibia gibbous above; base of tarsus short, with a slender projection on the outer side, bulb rounded, as large as tibia, higher than long, on inner side near tip is a darker lunate body, tube stout, shorter than bulb, oblique at tip, its lower edge projecting.

Ft. Collins, Colorado, in a house (Mrs. Ninette Baker).

CECOBIIDÆ.

Thalamia floridana n. sp.—Length ♀ 2 mm. Cephalothorax pale grayish, blackish on edges. Abdomen grayish, blackish on sides, no silvery spots, venter pale. Legs grayish, the femora show a blackish spot in middle of underside; sternum and coxæ pale yellowish; structure similar to *T. parietalis*, but the legs are a little shorter and stouter; the epigynum consists of two small connivent holes on posterior margin and a bifid median furrow in front.

Lake Worth, Florida (Mrs. A. T. Slosson). Readily separated from *T. parietalis* by its nearly uniform gray color and shape of epigynum.

DRASSIDÆ.

Micaria punctata nov. sp.—Length ♀ 2 mm. Cephalothorax blackish, basal joint of palpus black, rest white; femora of anterior legs black, rest of these pairs white (posterior pairs missing); sternum pale yellowish. Abdomen black above, on basal half four white spots forming a square, and on median line two elongate white spots; on posterior half there is a row each side of three small white spots; on the lower sides there is an oblique white spot near base, and another near middle, venter pale; cephalothorax short and broad, anterior row of eyes nearly straight, a. m. e. fully their diameter apart, closer to the equal a. s. e.; posterior row barely procurved, p. m. e. more than diameter apart, oblique, hardly their diameter from the equal p. s. e.; sternum very broad, sides rounded, pointed between the hind coxæ. Legs moderately short, with some scattered hairs, no spines, femur i about as long as width of cephalothorax. Abdomen twice as long as broad, not constricted, broadest near middle, tapering and pointed behind, covered above with blackish, somewhat iridescent scales; the epigynum consists of two openings about twice as long as broad, constricted in the middle, leaving a septum between them about as broad as their short diameter.

One specimen, Punta Gorda, Florida (Mrs. A. T. Slosson). Our smallest species.

Micaria coloradensis nov. sp.—Length ♂ 4 mm.; ceph. 1.6 mm. long, 1 mm. broad; a ♀ is 3 mm. long. Cephalothorax, sternum and legs light brown-

ish yellow, without markings, except the metatarsi, which are infuscated. Abdomen black above, paler below, clothed with greenish iridescent scales, a narrow white band before the middle; cephalothorax narrow; anterior row of eyes short, a. m. e. about their diameter apart, nearer to the a. s. e.; posterior row longer, the p. m. e. fully their diameter apart, scarcely so far from the p. s. e.; sternum a little longer than broad, pointed behind, sides rounded. Abdomen one and two-thirds longer than broad, widest at middle, a hard spot at base, not constricted; the ♂ palpus is similar to *M. constricta*, but the tibia is shorter, the projection on the outerside very much larger and stouter, being nearly as long as the width of the joint, the palpal organ has the tube longer than in *M. constricta*, the inner tube shows as in that species, and there is a hook in the same position; on the tarsus near the tip of the tube are three very stout black spines; the epigynum consists of a somewhat quadrangular cavity with rounded corners, broader behind than long, and divided by a narrow septum; in the bottom the anterior darker portion is obliquely separated from the smaller posterior portion.

Ft. Collins, Colorado (Mrs. Ninette Baker). One male has the cephalothorax and sternum wholly infuscated.

Micaria perfecta nov. sp.—Length 2.8 mm.; ceph. 1.2 mm. long, .85 mm. wide. Cephalothorax dark brown, clothed with white hairs; femora i and ii black, rest of legs pale yellowish; sternum blackish. Abdomen black, clothed with iridescent scales, a band at base and a narrow one before the middle, white; a. m. e. hardly their diameter apart, close to a. s. e.; p. m. e. about their diameter apart, nearer to p. s. e. Legs moderately short, femora stout; sternum plainly longer than broad, tapering and pointed behind; abdomen over one and a half times longer than broad, cylindrical, not constricted, and without a hard spot at base; the ♂ palpus has the tibia but little longer than broad, and with a short stout projection on the outer tip; tarsus slender, bulb short, very convex, conically swollen in lower part, a large prominent hook above, the tube short and on the inner side, not at tip of bulb.

Ft. Collins, Colorado (Mrs. Ninette Baker).

Micaria palliditarsus nov. sp.—Length 4.6 mm.; ceph. 1.9 mm. long; tibia, plus patella iv, 2.05 mm. Cephalothorax yellow, blackish near base, mandibles and sternum yellow; first pair of legs wanting, other femora brownish or blackish, rest of leg ii pale, patellæ of iii and iv pale, lined with black, tibia and metatarsus iii brownish, tibia and metatarsus iv black, tarsi iii and iv pale. Abdomen black, covered with scales having a greenish reflection; a band of white scales just before the middle, narrowly interrupted above, broadly below. Head of cephalothorax narrower than in *M. longipes*; sternum long, pointed behind; abdomen a little constricted just before middle; the legs are very slender, there are several spines under tibia ii; p. m. e. barely once their diameter from the p. s. e.; more than twice that distance from each other.

One specimen (♀), Southern California.

Our species of *Micaria* may be separated by the following table:

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| 1. Abdomen not constricted..... | 2. |
| Abdomen constricted..... | 5. |
| 2. Abdomen with several small white spots above..... | punctata. |
| No small spots above..... | 3. |

3. Anterior femora darker than rest of legs, especially in the male.....4.
 Anterior femora paler than anterior metatarsi and tarsi....**coloradensis**.
4. Cephalothorax brown, ♂ palpal bulb conically swollen at base...**perfecta**.
 Cephalothorax paler, ♂ palpal bulb not swollen at base.....**montana**.
5. Body pale, covered with golden scales, legs almost wholly white....**agilis**.
 Body dark, with dark scales, legs dark.....6.
6. P. M. E. less than diameter apart, no lines on the legs.....**constricta**.
 P. M. E. fully their diameter apart, legs lined.....7.
7. P. M. E. not once their diameter from p. s. e.....**palliditarsus**.
 P. M. E. much more than their diameter from p. s. e.....8.
8. Cephalothorax pale yellow-brown.....**longipes**.
 Cephalothorax dark brown.....**formicoides**.

Ellice bicolor nov. sp.—Length 3.5 mm. Cephalothorax and legs reddish, the former blackish on the margin; legs more yellowish; abdomen black, sternum pale yellowish; cephalothorax nearly once and a half longer than broad, low, clothed with scattered black hairs, some longer ones on clypeus; anterior row of eyes about straight; a. m. e. less than their diameter apart, still closer to the very much larger a. s. e.; posterior row slightly longer than anterior one, distinctly recurved, the p. m. e. fully their diameter apart, closer to the slightly larger p. s. e.; m. e. equal, forming a quadrangle as high as broad behind; mandibles quite large and stout, slightly porrect, a broad tooth below. Legs moderate, patella plus tibia i shorter than cephalothorax, spines above on femora and some below on tibiae and metatarsi, tarsi about as long as metatarsi; sternum oval, pointed behind between hind coxae. Abdomen once and a half longer than broad, broadest behind the middle, depressed, slightly truncate at base, broadly rounded behind; the ♂ palpus has a prominent curved spine at outer tip of tibia, the palpal organ is divided obliquely into two lobes, the lower one bearing a short, stout, curved hook, from the tip arises the slender tube, it is twisted at base, then makes one nearly complete circle as large as the palpal organ.

One male, Punta Gorda, Fla. (Mrs. A. T. Slosson).

Callilepis pluto nov. sp.—Length 5.5 mm.; ceph. 2.4 mm. long, 1.8 mm. wide; tibia, plus patella i, 1.9 mm.; tibia, plus patella iv, 2.6 mm. Cephalothorax dark red-brown, nearly black, lined with black; mandibles, palpi and legs similar, tarsi of legs paler; sternum nearly black. Abdomen black, spinnerets dark red-brown; abdomen with yellowish hair above; a. m. e. separated by more than their diameter, and much closer to the larger a. s. e.; posterior row recurved, no longer than the anterior row, from which it is widely separated; p. m. e. oval, about their diameter apart, not quite so far from the larger p. s. e.; mandibles with a plate beneath the fang; sternum nearly as broad as long. Legs quite bristly, tibia i with five spines beneath, tibia iv with one spine above near the base. Abdomen depressed, once and a half longer than broad, rounded at base; the epigynum is broader than long, semicircular in outline, from the posterior margin there extends forward on each side a narrow, curved, pointed piece, reaching nearly to front margin, leaving on each outer side a slender channel, and in the middle between the two pieces a large cavity, which is almost filled by a pear-shaped body.

One female, Olympia, Washington (Trevor Kincaid). This species, at first sight, resembles *Prosthesima atra* Htz., but is readily separated by the structural characters.

Gnaphosa americana nov. sp.—Length 7.7 mm.; ceph. 3.4 mm. long, 2.3 mm. wide. Cephalothorax yellow-brown, with black on the ends of the radial furrows and just behind the pars cephalica; mandibles red-brown; legs, palpi and sternum yellow-brown. Legs darker on the tibiæ and metatarsi. Abdomen black, spinnerets brown; cephalothorax longer than tibia and patella i; both tibiæ i and ii have two spines beneath at tip, no others; posterior rows of eyes strongly recurved, p. m. e. about their diameter apart, and nearly three times that distance from the larger p. s. e.; sternum plainly longer than broad, truncate in front, broadest at coxæ ii, pointed behind. Abdomen depressed, truncate at base, with a fringe of stiff hairs, once and a third longer than broad; the cavity of the epigynum is divided into two parts; the anterior part is once and a fourth longer than broad, truncate in front and connected behind to the very much narrower posterior part, which is about twice as long as wide; the anterior part contains a large oval body, pointed in front, and, filling the cavity behind, it extends into and fills the posterior cavity; in its middle there is a somewhat triangular mark; behind the epigynum there is a parted line as in the other species.

One specimen, Ithaca, N. Y.; its small size and shape of epigynum readily distinguishes this from the other species of the genus.

Gnaphosa parvula nov. sp.—Length 5.4 mm.; ceph. 2.5 mm. long, 1.9 mm. wide. Cephalothorax yellow-brown with black marks on radial furrows, and a black V at end of pars cephalica; mandibles red-brown; femora, especially the anterior pairs, quite yellow; posterior femora more blackish, rest of legs tinged with red-brown; palpi yellowish; sternum and abdomen black, spinnerets pale; cephalothorax longer than tibia, plus patella i, quite narrow in front; p. m. e. less than their diameter apart, hardly twice their diameter from the larger p. s. e.; tibiæ i and ii without spines; sternum nearly oval, but truncate at base. Abdomen depressed, truncate at base, one and one-third times longer than broad; the epigynum is nearest to *G. brumalis*, but the middle finger is not pointed at tip, but blunt; it is shorter and divided by a transverse line; there is no basal striate body as in that species, but a rather broad plate containing a small rounded cavity in its posterior margin; the usual parted line behind the epigynum; the ♂ palpus has a spur on the outer side of tibia, the palpal organ has hard plates at base as in *G. brumalis*, but the tube is longer, though not so long as in *G. conspersa*, and the hook is stouter even than in the latter species.

A female, Hanover, N. H. (C. M. Weed); a male, Franconia, N. H. (Mrs. A. T. Slosson). Its small size, black sternum and peculiar epigynum, distinguish it from the other species.

Prothesima floridana nov. sp.—Length ♀ 6.5 mm.; ceph. 2.3 mm. long, 1.8 mm. broad, patella, plus tibia i, 2 mm. long. Cephalothorax yellowish; legs paler yellowish, except tibiæ, metatarsi and tarsi of anterior pairs, which are red-brown; mandibles red-brown; sternum yellowish. Abdomen pale whitish gray; everywhere clothed with fine blackish hair and stouter bristles; cephalothorax long and low; a. m. e. larger than other eyes, less than one-half their diameter apart, and still closer to the a. s. e.; posterior row slightly longer than the anterior one, and plainly procured; p. m. e. oval, oblique, about their diameter apart, scarcely so far from the p. s. e.; quadrangle of m. e. fully as long as

broad in front; mandibles quite large, distinctly porrect, fangs long; sternum slender, narrowed in front and behind. Legs short and stout, metatarsi and tarsi i and ii with scopulas, two spines below on tibia i and same on tibia ii, many below and on sides of the posterior pairs; abdomen depressed, once and a half longer than broad, truncate at base; the epigynum consists of a somewhat triangular cavity, nearly twice as broad as long, divided by a narrow septum.

One specimen, Punta Gorda, Fla. (Mrs. A. T. Slosson).

Prosthesima niger nov. sp.—Length 6-8 mm.; ceph. 2.2 mm. long. 1.7 mm. wide; patella, plus tibia iv, 3 mm. long. Cephalothorax, mandibles and sternum dark red-brown. Legs blackish, yellow on coxæ, tarsi and base of femora. Abdomen dark gray; posterior row of eyes straight, barely longer than anterior row; p. m. e. large, oval, not half their diameter apart, about their diameter from the smaller p. s. e.; sternum longer than broad, truncate in front, widest at second coxæ, sides rounded, pointed behind; the legs are very hairy; there are no spines above on tibiæ iii or iv, and none below on tibia i. Abdomen quite long and somewhat cylindrical, but slightly depressed; the epigynum consists of a cavity about as broad as long, widest in the middle and narrowed each end; in front is a broad plate, concave behind, from this extends backward a large clavate septum whose posterior tip rests in an extension of the main cavity.

Three specimens, Olympia, Washington (Trevor Kincaid). Differs from *P. atra* in the paler color, the oval p. m. e., the longer hind legs, and in different epigynum.

Prosthesima valida nov. sp.—Length ♀ 9 mm.; ceph. 3.8 mm. long, 2.5 mm. wide; patella, plus tibia iv, 4.1 mm. Cephalothorax, mandibles, legs and palpi red-brown; legs darker on metatarsi and tarsi; sternum dark red-brown; abdomen above and below dark gray, nearly black in front and blackish on the sides; spinnerets yellowish. Body and legs with black hairs. Legs quite slender, with scopulas to tarsi and metatarsi (except iv), three spines below on tibia i, and one above on tibia iv; posterior row of eyes straight, barely broader than anterior row; p. m. e. round, separated by their diameter, nearer to each other than to p. s. e.; a. m. e. largest eyes, separated by nearly their diameter, half that distance from the a. s. e.; the epigynum consists of a cavity longer than broad, divided by a septum, the anterior half of the cavity being covered by a thin plate. What I take to be the male of this species is smaller and paler; 7. mm. long; the cephalothorax and legs yellowish, the abdomen nearly white, with a triangular corneous plate at base above; there are two rows of three spines each under tibia i, and one spine above on tibiæ iii and iv; the tibia of the ♂ palpus is much broader than long, on the outer side is a curved projection ending in two sharp points; the tarsus is more than twice as long as broad; there is a dark process along the outer side, and a dark line on half the inner side; the tube is very small and short, terminating the oblong bulb; at the tip there is a swollen white portion.

Los Angeles, Cal. (Dr. A. Davidson).

Drassus vastus nov. sp.—Length ♀ 11 mm.; ceph. 4.6 mm. long, 3 mm. wide; patella, plus tibia iv, 5.2 mm. Cephalothorax and legs yellowish, with a tinge of brown, metatarsi and tarsi blackish, mandibles reddish, sternum yellow-brown; abdomen grayish brown, darker near tip, with several faint light chev-

rons on the posterior part of dorsum; everywhere densely hairy. Legs 4 1-2-3, metatarsi (except iv) and tarsi with dense scopulas; no spines above on any of the tibiae, one spine below on tibia i; posterior row of eyes procurved, longer than the anterior; p. m. e. oval, more than their diameter apart, slightly nearer to each other than to p. s. e.; anterior row straight; a. m. e. the larger and nearer to a. s. e. than to each other; sternum broad, the epigynum consists of a somewhat circular cavity, from the anterior edge of which there projects a large plate emarginate on its posterior border.

Olympia, Wash. (Trevor Kineaid). *

Drassus placidus nov. sp.—Length ♀ 7. mm.; ceph. 2.5 mm. long, 1.9 mm. wide; patella, plus tibia iv, 2.5 mm. Cephalothorax and legs pale yellow-brown, blackish around eyes; mandibles dark red-brown; sternum yellow-brown, darker on edges; abdomen above and below gray; posterior row of eyes procurved; p. m. e. large, oval, close together, very far from s. e.; a. m. e. separated by nearly their diameter, closer to the s. e. than to each other. Legs short, quite hairy, but with few spines, none on any of the tibiae, scopulas on tarsi very thin; sternum moderately broad; epigynum consists of a cavity broader than long, containing a large plate, the posterior end of which has a small projection to the posterior margin of the cavity.

Ames, Iowa (Prof. C. P. Gillette).

CLUBIONIDÆ.

Anyphaena floridana nov. sp.—Length ♀ 8 mm.; ceph. 3 mm. long; patella, plus tibia iv, 3.2 mm. Cephalothorax pale yellowish, darker around eye-region, legs similar, metatarsi and tarsi of anterior pairs darker; mandibles red-brown; sternum pale, abdomen whitish; a. m. e. less than diameter apart, a little closer to the equal a. s. e.; p. m. e. once and a half their diameter apart, barely closer to the equal p. s. e.; mandibles large, scarcely porrect; sternum oval; legs moderate. 1-4-2-3; tibia, plus patella i, a little longer than those joints of leg iv, metatarsus iv no longer than i, all with many spines. Abdomen oval, ventral furrow much nearer to the epigynum than to spinnerets; the epigynum has a septum twice as long as long as broad, terminating behind in two black spots, on each anterior side an anteriorly pointed cavity.

One female, Lake Worth, Florida (Mrs. A. T. Slosson).

Gayenna fraterna nov. sp.—Very similar to *G. calcarata* Em.; the legs a trifle longer, the tarsus of ♂ palpus much longer, and the piece, which in *G. calcarata*, is broad and incurved at tip, is much more slender and only its fine tip incurved; the prominences on the coxæ are similar, but the bifid process of the third coxa of *calcarata* is here smaller, slender and simple, not bifid; the color is paler than in *calcarata*, and the spots and dots more scattered.

Two males; one Harbor Hill near Roslyn, N. Y., May; the other from Carpenter's Woods near Sea Cliff, N. Y., June.

Gayenna pacifica nov. sp.—Length ♀ 6 mm.; ceph. 2.4 mm. long, 1.8 mm. wide; patella, plus tibia iv, 2.3 mm. Cephalothorax brownish yellow, with an irregular brownish stripe each side connecting through the eye-region, the enclosed area is usually lineate with brown. Abdomen covered with brownish

lines and spots, more or less reddish in the interspaces; mandibles almost black; sternum yellow-brown; femora and patellæ pale brownish, with some black lines; tibiæ, metatarsi and bases of tarsi dark brown, tips of tarsi pale; young specimens are often suffused with red; cephalothorax broad and low; a. m. e. fully their diameter apart, much closer to a. s. e.; p. m. e. once and a half their diameter apart, scarcely so far from the p. s. e.; mandibles stout, vertical; sternum oval; abdomen once and two-thirds longer than broad, densely hairy, tracheal openings a little behind the middle of venter; the epigynum consists of an area longer than broad, broadest just behind the middle, anterior sides concave, posterior sides convex; it is indented from behind to near the middle, where there is a small circular cavity.

Olympia, Wash. (Trevor Kincaid).

Gayenna maculata nov. sp.—Length 4.4 mm. Cephalothorax yellowish, with a black dentated stripe each side, and a line behind each p. m. e. Abdomen whitish, with a large black spot each side at base, two converging rows of four very distinct and quite large spots, a large apical spot, and some small, scattered spots black; the sides mostly black; venter with a few black spots; two black lines on the mandibles. Legs yellowish, with some bands and black spots, sternum pale; similar to *A. celer*, but the ♂ palpus has the swelling on the tibia larger, and the projection of the tibia has the outer part much smaller, while the inner part is shaped differently, being longer, contracted in the middle and bilobed at tip; the tarsus is very similar, the central strip is more slender and recurved at tip, and the tube is longer.

One ♂, Washington, D. C., November.

I at first thought this was *A. celer* Hentz, but Hentz says that the spots on the abdomen are indistinct, which would agree with Keyserling's *incerta* rather than this species. Moreover, this species is probably quite rare, while *A. incerta* is very common.

Clubiona mœsta nov. sp.—Length 4-6 mm.; ceph. 2.2 mm. long, 1.7 mm. wide; patella, plus tibia iv, 2 mm. Cephalothorax pale yellowish, growing darker on the head, no marginal line; mandible dark red-brown; lip and maxillæ red-brown; sternum yellowish; legs pale; abdomen reddish or brownish, showing a faint basal spear-mark; venter whitish, epigynum black; cephalothorax clothed with white and black hairs and black bristles. Head moderately broad; all eyes about equal; a. m. e. about their diameter apart, barely so far from a. s. e.; p. m. e. over three times their diameter apart, over twice their diameter from p. s. e.; mandibles large and prominent; sternum oval, truncate in front. Legs moderately stout, only one spine beneath on tibia iii; the epigynum is an area broader behind than in front, the posterior margin sinuate, two large circular cavities about their diameter apart, the portion between them extends behind as a truncated lobe; the male palpus has a large, stout projection on the outer tip of tibia, truncate at the end; the tarsus is oblong, about twice as long as broad, truncate at tip, the tube is bent at a right angle and then curves back on the outer side, there is a broad middle plate, truncate at tip, with a small black cone at each corner.

Several specimens, Chicago, Ill., October; also Ft. Collins, Colo., May (Mrs. Baker).

Clubiona pacifica nov. sp.—Length 8 mm.; ceph. 3 mm. long; 2.1 mm. wide; patella plus tibia iv, 3 mm. Cephalothorax brownish yellow; darkest near eye-margin; mandibles reddish brown; sternum, legs and palpi yellowish; last joints of palpi and tips of tarsi blackish; abdomen gray or reddish, with a median basal brown stripe reaching almost to the middle of dorsum; the a. m. e. about their diameter apart, and about the same distance from the larger a. s. e.; p. m. e. two and one-half times their diameter apart, about twice their diameter from the smaller p. s. e.; the a. s. e. a little larger than p. m. e.; mandibles large and slightly porrect; sternum narrow, truncate at base; fourth pair of legs much the longest, all with scattered black spines, two or three beneath on tibia iii; there is a patch of blackish hairs on the underside of the tips of metatarsi iii and iv; the epigynum has a large middle lobe, concave behind, each side there is a round cavity separated by a clavate septum.

Several specimens, Olympia, Wash. (Trevor Kincaid).

Phrurolithus affinis nov. sp.—Length ♂ 2.2 mm. Cephalothorax yellow-brown, streaked with black; legs yellowish, blackish on bases of anterior femora; sternum pale, with blackish edges; abdomen black, with an indistinct pale curved spot each side before the middle, a still less distinct pair at base; structure very similar to *P. pugnatus*, but the eyes of posterior row are farther separated, the p. m. e. being about two-thirds their diameter apart (less than half in *P. pugnatus*); sternum very broad and triangular; the palpi are similar to *P. pugnatus*, but larger; the outer process of the tibia is slightly outcurved near its tip; the projection to the femur is near the base.

One male, Ft. Collins, Colorado (Mr. Baker). It can hardly be a western variety of *P. pugnatus*, as I have typical specimens of the latter from Washington.

Apostenus cinctipes nov. sp.—Length 4. mm. Cephalothorax yellowish, eyes surrounded by black; a reddish stripe each side, starting quite narrow, but becoming much broader near dorsal groove; a black marginal line; mandibles, legs and sternum pale yellowish; red bands at middle and tip of femur, on patella, and at bases and tips of tibia and metatarsus; abdomen pale, suffused with reddish above and some white spots, a distinct basal red spear-mark, faintly connected to some apical red chevrons; venter yellowish; cephalothorax somewhat similar to *Agræca*, head quite distinct. Abdomen oval, broadest a little behind the middle; sternum quite broad, pointed behind; lip much broader than long; fourth legs longest, then first; all with stout spines, those under tibia and metatarsi i and ii being very stout and long, and arising from slight projections; two rows of five each under tibia, two rows of three each under metatarsus: upper row of eyes slightly recurved, equally large, and very much larger than lower eyes; the p. m. e. closer to s. e. than each other; the a. m. e. smaller than a. s. e.; clypeus very low; the epigynum shows two anteriorly diverging reddish ridges, the narrow furrow between them has an opening behind, each side is a yellowish elliptical patch.

One specimen, Olympia, Wash. (Trevor Kincaid). This genus is related to *Phrurolithus*, but the eyes of the posterior row are much larger, and the row slightly recurved; the a. m. e. are smaller than the a. s. e.

Corinna pacifica nov. sp.—Length 6.8 mm.; ceph. 2.3 mm. long, 1.4 mm. wide; patella plus tibia iv, 2.2 mm. Form of *C. amana*. Cephalothorax and mandibles reddish, eyes surrounded with black; sternum red-brown; femora reddish, rest of anterior legs yellowish, posterior legs suffused with brown; abdomen dark red-brown, rubbed, but showing some plumose white scales near the base; a. m. e. separated by about their diameter, about as large as p. s. e.; sternum a little longer than broad; a horny shield at base of the abdomen in the female, the male abdomen wholly covered above by a horny shield; the epigynum shows two oval openings, more than their diameter apart, about like *C. pinnata*. Length of male 5.6 mm.; the tibia of the palpus has two conical projections below, the basal one the larger; the tarsus is long, attenuated at tip; the pale organ much like *C. crocata*, but the tube very short.

Olympia, Wash. (Trevor Kincaid).

Corinna media nov. sp.—Length ♂ 5.4 mm., ceph. 2.2 mm. long, 1.2 mm. wide; patella plus tibia iv, 2.1 mm. Form of *C. birittata*. Cephalothorax, mandibles and sternum reddish, anterior legs yellowish, brownish on femora, posterior femora pale at base and on underside, rest black, patella marked with black, tibiae pale at base and tip, metatarsi wholly black, tarsi blackish. Abdomen dark brown, nearly black above, with a narrow basal band and two other broader bands before the middle, a narrow middle band, and a subapical circle white; a. m. e. separated by much more than their diameter, slightly smaller than p. s. e.; sternum a little longer than broad.

Olympia, Wash. (Trevor Kincaid). One ♂ not quite adult.

THERIDIDÆ.

Mysmena bulbifera nov. sp.—Length ♂ 1.3 mm.; ♀ 1.5 mm. Cephalothorax reddish, eyes surrounded by black rings; mandibles and sternum reddish; legs yellow. Abdomen grayish, with two small silvery spots on each side, in the ♀ there is a black spot between them. Head raised, posterior row of eyes procurved, s. e. touching, p. m. e. largest, less than their diameter apart; a. m. e. their diameter apart; mandibles of the ♂ with a large tooth near tip over the base of the fang. Legs moderately long, first pair longest, hairy, a hump on posterior side of each patella; sternum broad, rounded behind; ♀ not quite adult, the abdomen globose, region of epigynum swollen and with a transverse fissure; ♂ palpal organ a nearly spherical bulb, the tarsus reduced to a slender projection from base, tube short, with a short projection each side.

Washington, D. C.; Jamesburg, N. J.; Shreveport, La.; Runnymede, Fla.

Mysmena 4-maculata nov. sp.—Length ♀ 1.5 mm. Cephalothorax, legs and sternum pale yellowish, the latter blackish on margins, eyes on black spots; abdomen gray, with a large black spot each side at base, and a smaller one on each posterior side some distance above the spinnerets, a dark median stripe on venter; eyes large, the m. e. but little larger than the s. e.; p. m. e. their diameter apart, closer to the p. s. e. Legs quite stout, shorter than in *M. bulbifera*, clothed with stiff bristles, no spines, metatarsi longer than tarsi, a hump on the posterior side of each patella; sternum as broad as long, broadest between coxæ i and ii, sides undulate, rounded between hind coxæ. Abdomen high, glo-

bose, but plainly longer than broad, with stiff bristles; the epigynum is a hemispherical area, in the middle of which are two red holes, about their diameter apart.

One specimen, Punta Gorda, Fla. (Mrs. A. T. Slosson).

Ceratinopsis bicolor nov. sp.—Length 1 mm. Cephalothorax wholly blackish above, p. m. e. and s. e. white; mandibles marked with black; maxillæ and lip blackish; sternum large, convex, with a few blackish patches. Legs and palpi pure white. Abdomen globose, white, yellowish around base and spinnerets, a black circle each side above the lung-plates.

Of this very distinct little species I have two females, neither quite adult; from a deep swamp near Ithaca, N. Y.

Ceratinopsis similis nov. sp.—Length ♀ 1.3 mm., ♂ 1.1 mm. Cephalothorax orange, each eye with a black ring; sternum red or yellow; femora orange, rest of legs gray. Abdomen of ♀ reddish above with a few lines near tip, venter whitish; ♂ abdomen gray, the spinnerets blackish. It is smaller and paler than *C. nigripalpis*, but quite similar in structure; the ♂ palpus has the projection of the tibia longer and larger than in that species; the middle space of the epigynum is narrow at base, and tapers more gradually than in *C. nigripalpis*.

One ♂, Shreveport, La.; one ♀, Rummymede, Fla.

In the genus *Ceratinopsis*, *C. interpres* is hardly congeneric with the other forms, and my *C. frontatus* is a *Maso*; the other species may be separated as follows:

1. Cephalothorax wholly black.....**bicolor**.
Cephalothorax mostly reddish.....2.
2. Sternum with many roughened, irregular dark marks; black spot on pars cephalica not truncate behind.....**laticeps**.
Sternum without any such markings.....3.
3. The black spot covering whole of head, truncate behind..... **nigriceps**.
Black spot only around eyes.....4.
4. Each eye with a black ring.....**similis**.
Black spot including all the eyes..... **nigripalpis**.

Maso polita nov. sp.—Length ♂ 1.5 mm.; ♀ 1.7 mm. Cephalothorax yellow-brown, blackish around eyes. Abdomen whitish or greenish; the sternum brown; legs pale. Head broad, very much so in the ♂; in ♀ the p. m. e. are less than their diameter apart, and a little farther from the p. s. e.; a. m. e. but little separated, and farther from the a. s. e.; in the ♂ the s. e. are very much more removed from the m. e. than in the ♀. Legs moderate, in the ♀ there are long spines under tibiæ i and ii, each tibia bears above one spine near base and one near tip, and one or two very long fine hairs; sternum short, sides rounded, obtusely pointed at tip, hind coxæ widely separated; the epigynum shows a transverse reddish area, in the middle a small cavity divided by a broad septum, sometimes the red each side appears as a round cavity; the tibia of the ♂ palpus has a stout projection on the outside, and another above; the tube starts from the outside, curves toward the tip and extends upward beyond the tarsus; there is a broad piece at base.

Several specimens, Washington, D. C.

The genus *Maso* is distinguished from *Ceratinopsis* by not having the sternum broadly truncate behind, in the spiny anterior tibiae of ♀, and in the broad head of ♂.

Grammonota maculata nov. sp.—Length 2 mm. Cephalothorax and mandibles reddish yellow, eyes surrounded by black; legs and sternum pale; abdomen white, with a more or less connected median row of black spots above and a few on the sides and around the spinnerets. Legs moderately long, one spine above on each tibia. Head slightly elevated behind the eyes, more so in ♂ than ♀; sternum broad, triangular, produced between hind coxae. Abdomen but little broader than cephalothorax, twice as long as wide; the epigynum shows each side a reddish elliptical area and between them a red area much broader than long and divided in the middle, behind it is a small semicircular lobe; the tibia of the ♂ palpus has a hook on the outside much like *G. ornata*, but longer; the palpus much like *G. ornata*; there is a large plate on outside with band across and a large hook at base, the outer end bent nearly at a right angle backward, the other end bent upward; on inside a piece like that in *G. ornata*; the tube is a little longer and the tip less curved than in that species.

Runnymede, Fla.; Brazos County, Texas.

Bathyphantes floridana nov. sp.—Length 1.6 mm. Cephalothorax and legs dull yellow-brown; sternum black; abdomen black; everywhere clothed with long fine hair. Head somewhat elevated; eyes large, posterior row nearly straight; p. m. e. about their diameter apart, closer to the p. s. e.; mandibles quite large and stout. Legs moderately slender; sternum convex, about as broad as long, narrowed between the hind coxae. Abdomen about twice as long as broad, subcylindrical; the epigynum consists of a hardened semicircular area, with a narrow finger across it; the male palpal organ is quite complicated; the tibia is short and broad, with two minute teeth on the tip above; the tarsus has two sharp-pointed teeth projecting backward from its basal end above, the upper tooth the larger; the hook is slender, divided into three parts, the inner larger part is broadly rounded, the two other parts across the base of the palpal organ are sharp-pointed and slightly bent; there is a slender upright piece slightly curved and on one edge with a fringe of hairs.

Punta Gorda, Fla. (Mrs. A. T. Slosson).

Bathyphantes parva nov. sp.—Length ♀ 1.4 mm. Cephalothorax yellow-brown, blackish around eyes, legs yellowish, palpi brownish, sternum and venter brown. Abdomen dark gray, above with three cross-bands and a large apical spot white, on the sides the apical spot extends a short distance toward the base; cephalothorax broadest beyond middle, broadly truncate behind; abdomen broadest before middle, tapering behind; posterior row of eyes straight; p. m. e. less than their diameter apart, about as far from p. s. e.; a. m. e. small and close together; sternum about as broad as long, broadly rounded between the hind coxae. Legs long and slender, two spines above on tibiae; region of epigynum swollen, emarginate behind, a small central finger nearly across it, each side shows a curved tube.

Washington, D. C.; one specimen.

Easily separated from the other banded species of the genus by its small size and peculiar pattern of markings.

Bolyphantes pacificus nov. sp.—Length ♂ 2. mm. Cephalothorax, legs and palpi wholly reddish; abdomen black, with small pale spots, and a large transverse white one a little above the pale spinnerets. Head prominent with some scattered granules above; a large projection just behind the eyes, with several short hairs and a long, stiff, curved bristle at tip; posterior row of eyes barely recurved; p. m. e. fully their diameter apart, and about as far from the p. s. e.; in ♂ hardly their diameter apart, and closer to the p. s. e.; a. m. e. small and about their diameter apart; sternum very broad in front, blunt pointed behind. Legs long and slender; ♂ abdomen more than twice as long as broad; the ♀ lacks the granules on the head, and the large oval abdomen has no white spot; the epigynum shows a pair of rounded lobes behind, and in front and partially lying upon them is another pair closer together, each outside of the latter pair there is a small black hole; the ♂ palpus is similar to *B. drassoides* Em.; the projection to the tibia is not so long and proportionally broader; the hook of the tarsus extends back to the base of the tibia, but is stouter than in *B. drassoides*, and there is no other tooth; the tube starts as in *B. drassoides* and extends upward along the lined piece.

Olympia, Wash. (Trevor Kincaid).

EPEIRIDÆ.

Plectana venusta nov. sp.—Length 7 mm., ceph. in front 1.8 mm. Cephalothorax pale yellowish, brown each side; abdomen yellowish, a brown spot near base, a broad whitish band and behind a triangular brown spot, sometimes a whitish stripe from basal spine and then a brown folium; venter brown, with two pale spots; sternum brown, with a pale central mark. Legs pale, banded with brown; cephalothorax nearly twice as long as broad; sternum once and a half longer than broad. Abdomen plainly longer than broad, with the same number of projections as in *P. stellata*, but four of them very much enlarged, viz., the median one at base, one at each anterior corner, bifid at tip, and the apical one over the spinnerets, on each side are three small humps; the epigynum has a finger similar to *P. stellata*.

One female and two young, Punta Gorda, Fla. (Mrs. A. T. Slosson). Related to *P. stellata*, but easily distinguished by its much narrower body and the enlarged spines on the abdomen above.

Singa floridana nov. sp.—Length 3.7 mm. Cephalothorax greenish yellow, pars cephalica reddish, darkest on sides; mandibles with red lines. Legs greenish yellow; patella, tibiae and metatarsus of anterior pairs with elongate red spots, less distinct on the hind pairs; sternum and coxæ greenish yellow. Abdomen greenish yellow, with two prominent submedian red stripes reaching from base to tip, broadest at base and converging toward tip, where they surround the spinnerets; three white stripes, one between the red and one each side; cephalothorax a little shorter than femur i; a. m. e. a little closer to each other than to the slightly smaller a. s. e.; p. m. e. about once and a half their diameter apart, more than twice their diameter from the somewhat smaller p. s. e.; quad-

range of m. e. slightly narrower behind than in front. Legs moderately slender, clothed with bristles and scattered spines, mostly above and on the sides of joints, a distinct hump on posterior sides of all patellæ; sternum barely longer than broad, sides undulate, pointed behind. Abdomen once and a fourth longer than broad, broadest in middle, not tapering behind; the epigynum has a short pale finger with recurved tip, each side a brown, nearly circular cavity.

One specimen, Punta Gorda, Fla. (Mrs. A. T. Slosson).

Singa modesta nov. sp.—Length 3.5 mm. Cephalothorax pale yellow-brown, a large white spot, anteriorly pointed, on posterior part of the pars cephalica. Legs pale yellowish, more brown on the middle of the joints; mandibles pale, with a brown spot; sternum yellow-brown, blackish on the sides. Abdomen black, a narrow white stripe on each side, meeting behind above the spinnerets, above with many irregular white spots and two pairs of impressed dots: venter with a narrow white stripe each side, sometimes broken up into spots; cephalothorax three-fourths as broad as long, longer than femur i, about as long as patella plus tibia i; a. m. e. a little closer to each other than to the slightly smaller a. s. e.; p. m. e. larger than other eyes and about once and a half their diameter apart, about twice their diameter from p. s. e.; legs moderately short, with many bristles, probably a few spines, but all rubbed off, a little hump on posterior sides of all patellæ: sternum triangular, about as broad as long, sides undulate, blunt pointed behind; abdomen elliptical, once and a half longer than broad; epigynum consists of a quadrate area, in which is the outline of a triangular body with the apex forward, this is traversed by a narrow septum.

Two specimens, Punta Gorda and Lake Worth, Fla. (Mrs. A. T. Slosson).

THOMISIDÆ.

Xysticus floridanus nov. sp.—Length 3.2 mm. Cephalothorax yellow-brown, marginal seam dark, two elongate converging whitish spots on the posterior part of the pars cephalica, a white band through the eye-region; femora i and ii pale yellow-brown, darkest toward tips, the tibiæ clear red-brown, the metatarsi paler and the tarsi yellowish, posterior legs wholly pale; sternum pale. Abdomen whitish above, with four large irregular brown spots, their outer margins connected, the posterior pair transversely united, the sides light brown; venter pale brownish with white dots; cephalothorax moderately low, as broad as long, hardly shorter than femur i; eyes of posterior row about equal; a. m. e. equal to p. m. e., but closer together; a. s. e. very much larger than other eyes. Legs moderately short and stout, three spines in front and one above on femur i; tibiæ i and ii with four pairs below, three pairs under metatarsi i and ii; sternum plainly longer than broad, sides rounded. Abdomen truncate at base, slightly narrower and barely longer than the cephalothorax; the male palpus has an elevated ridge on the base of tibia, which is prolonged on the inner-side; a pointed projection at tip of tibia; tarsus broad, distinctly pointed at tip; palpal organ broad, simple, from the lower inner end a tube arises and runs upward and around the bulb, near the lower middle is a short curved black hook, and on inner side a dark stripe runs upward and around the end.

One male, Punta Gorda, Fla. (Mrs. A. T. Slosson).

Coriarachne floridana nov. sp.—Length 4. mm. Cephalothorax uniform brown; legs a paler brown, except the tarsi, which are whitish; above with some scattered silvery dots, below none; a short white band in eye-region; sternum light brown. Abdomen brown, with silvery dots on sides and larger transverse spots above; venter gray-brown; very similar in structure to *C. versicolor*, but the palpal organ is broader, the bulb nearly circular in outline, more distinctly divided into two portions, the tube similar, but hardly as long, the projections on the tibia are the same; four pairs of spines under tibiæ and metatarsi i and ii; an immature female resembles the male, but is of a paler brown color.

Punta Gorda, Fla. (Mrs. A. T. Slosson).

Misumena viridans nov. sp.—Length ♀ 4 mm., ♂ 3 mm. Cephalothorax and legs green, tarsi more yellow, both with long, prominent, black bristles; sternum paler. Abdomen whitish, more gray above, with some silvery spots and red dots at the bases of some of the black bristles; cephalothorax broad, considerably narrowed in front; the a. m. e. hardly nearer to a. s. e. than to each other; m. e. equal, forming a square; four pairs of spines under tibiæ i and ii; three pairs under those metatarsi; femur i longer than the cephalothorax; sternum but little longer than broad, sides rounded. Abdomen broad, pointed behind, convex above; on each side of the epigynum are two curved dark spots; there is a broad septum to the cavity as in the other species; the ♂ is similar to the ♀, but with longer legs, and on them red bands as follows: at tip of patellæ, at base and tip of tibiæ, and apical half of metatarsi and tarsi; posterior legs with red spots at tips of patellæ and tibiæ; abdomen with four red spots above on basal half and four red bands on apical half, a red ring around base of spinnerets; there is a short blunt projection on the outer tip of the tibia of the ♂ palpus; the palpal organ nearly circular in outline, the tube arising near the outer tip and extending around on inner side to near base.

Three specimens, Punta Gorda, Fla. (A. T. Slosson).

Misumena bellula nov. sp.—Length ♀ 4 mm. Cephalothorax pale yellowish, with a broad irregular red-brown band each side, and sometimes a brown line on extreme margin, eye-region and clypeus reddish, a median line from between p. m. e. extending back to near dorsal groove; a silvery white spot each side of its tip; mandibles with a spot at base, and a transverse line reddish; anterior legs sometimes almost wholly red-brown, with pale at bases of femora, but more often pale in the middle of the joints, with spots at the bases of the bristles; sternum and posterior legs whitish. Abdomen with a broad fuscous stripe each side from base to spinnerets, above mottled white and gray, with a basal spear-mark and behind four converging pairs of fuscous spots, bases of the bristles reddish; venter pale, with a broad median dark area; cephalothorax about as broad as long; eyes of anterior row about equal distances apart; m. e. equal, forming a square; femur i much longer than cephalothorax, four pairs of spines under tibiæ i and ii, five pairs on those metatarsi; sternum plainly longer than broad, sides rounded; abdomen broadest behind the middle, pointed behind, convex above; the epigynum consists of a broad septum passing under an anterior ridge, which is convex behind, side is an oblong cavity, and behind are two small holes.

Four specimens, Punta Gorda, Fla. (Mrs. A. T. Slosson).

LYCOSIDÆ.

Lycosa floridana nov. sp.—Length 14 mm. long, 4 mm. broad; tibia, plus patella i, 6 mm.; tibia plus patella iv, 7 mm. Cephalothorax dark brown, two pale lines on pars cephalica and a white interrupted line on each side above the margin; mandibles black; sternum pale yellowish, with a median black stripe; femora yellowish brown, rest of legs darker, sometimes indistinctly banded on posterior tibiæ. Abdomen black above, with small, scattered white dots; venter pale, with a darker central stripe; first row of eyes procurved, eyes of second row hardly their diameter apart, and about the same distance from the slightly smaller eyes of the third row; three pairs of spines under tibia i, two pairs under metatarsus i; sternum oval; abdomen quite slender, cylindrical; the epigynum consists of a rounded cavity, a little longer than broad, in which there is an inverted T-shaped septum, much the broadest in front, somewhat like *L. pratensis*.

One specimen, Punta Gorda, Fla. (Mrs. A. T. Slosson).

Trochosa floridana nov. sp.—Length 6.5 mm., ceph. 3 mm. long, 2.1 mm. broad; tibia plus patella i, 2.4 mm.; tibia, plus patella iv, 3 mm.; the cephalothorax is pale yellowish, with black spots around the eyes, a brown irregular stripe each side, leaving the pale central area about as broad behind as in front; mandibles red-brown; sternum and legs pale yellowish, indistinct darker bands on patellæ, bases and tips of tibiæ, metatarsi and tarsi yellowish brown. Abdomen whitish, with an indistinct yellowish basal spear-mark and a broad irregular black stripe on each upper side, behind the basal third this is broken up into spots; region of epigynum pale red-brown; cephalothorax and head low, sides convexly sloping; first row of eyes as long as the second, straight, all close together; eyes of second row much less than their diameter apart; dorsal eyes much closer together than usual, not further from each other than from the slightly larger second eyes; mandibles long and stout; sternum but little longer than broad, rounded. Legs short, three pairs of spines under tibiæ and metatarsi; abdomen once and two-thirds as long as broad; the epigynum shows only as a concave transverse ridge.

Two specimens, Punta Gorda, Fla. (Mrs. A. T. Slosson).

OXYOPIDÆ.

Oxyopes compacta nov. sp.—Length 6 mm., ceph. 2.7 mm. long, 2 mm. broad. The cephalothorax is dark brown, a vertical white spot on the center of clypeus; mandibles dark brown, with a pale line; sternum dark brown, pale in center; coxæ pale. Legs pale, the femora, except base, infuscated; patellæ brown, brown bands on base, middle and tip of tibiæ and metatarsi. Abdomen dark brown, paler on lower sides; a broad dark brown stripe on venter; everywhere clothed with white scales, those on posterior middle of abdomen somewhat rufous and on each side of abdomen above above they form two or three oblique white lines, and on cephalothorax an indistinct central stripe; cephalothorax highest in eye-region, slightly concave behind; p. m. e. about two and a half times their diameter apart; legs moderately long, with long spines; sternum somewhat oval; abdomen one and a half times longer than broad, broadest near base, tapering and blunt pointed behind; the epigynum consists of a cavity twice as wide as

long, partially covered by a lobe one and one-fourth times as wide as long; somewhat like *O. scalaris*, but the lobe not as broad and showing more of the cavity each side.

Ft. Collins, Colo. (Mrs. Baker).

ATTIDÆ.

Phileus monticola nov. sp.—Length 6.5 mm., ceph. 3 mm. long, 2.2 mm. broad. Cephalothorax black, a broad white stripe each side, but not reaching the hind margin, white on clypeus, a tuft of stiff black hairs just behind eyes of second row, a smaller tuft behind lateral eyes of first row; mandibles slightly iridescent greenish. Legs red-brown, tarsi paler, clothed with white hair, very long under femur and tibia i; sternum dark red-brown. Abdomen black, a narrow white band around base, a broad tawny stripe on each upper side; venter with a white stripe each side; a white stripe on inner side of patella and tibia i, a yellowish stripe above on tibia i; of the usual structure of the genus; there is a short truncate projection at outer tip of tibia; palpal organ divided into two parts, the lower and larger has a convex projection on the inner side; on the outer side there is near the tip a mark like that of *P. militaris*; the upper part is broader than long, irregularly striate, with a black tube at tip, which is sinuate, and has a simple tip.

One male, Ft. Collins, Colo., sweeping, May (Baker).

Icius pleuralis nov. sp.—Length 4 mm.; ceph. 1.6 mm. long, 1.25 mm. broad. Cephalothorax red-brown, clothed with golden scales; legs red-brown, except the pale tarsi; tarsi, patellæ and tibiæ ii, iii and iv, lined with pale yellowish; sternum and mouth-parts red-brown; anterior coxæ reddish, others pale. Abdomen whitish, a broad red-brown stripe on each side, dorsum with scattered golden scales and short black hairs; the cephalothorax is low and flat, eye-region one-third broader than long, slightly broader behind than in front, eyes of second row nearer to lateral than dorsal eyes; first row straight, all nearly touching, the diameter of lateral eyes is scarcely as great as radius of middle eyes; mandibles short and stout; anterior coxæ separated by nearly width of lip; sternum broadest in middle, one-third longer than broad, blunt pointed. Legs quite short and stout, first pair stoutest, but little longer than fourth pair, three pairs of spines under tibia i, two pairs under metatarsus i; metatarsus iv spined only at tip. Abdomen nearly once and two-thirds as long as broad, broadest a little before the middle, moderately depressed; the epigynum has a central piece nearly twice as long as broad, outlined in front by a narrow oblique cavity each side, and behind deeply excised in the middle.

One female, Punta Gorda, Fla. (Mrs. A. T. Slosson).

ACARINA.

Trombidium marinus nov. sp.—Length 2 mm. Bright red; body pyriform, but not so large in front as in some species, a few depressions above; eye-stalks short; mandibles slender. Legs short, anterior pair shorter than body, posterior pair not reaching to tip of abdomen; last joint of leg i slightly enlarged, barely longer than the preceding joint. Body with short feathered hairs, not so short, however, as in *T. sericeum*; second joint of palpus quite long; third short, barely longer than broad; claw quite long; thumb longer than claw, clavate, and with many fine hairs, longer than in *T. sericeum*.

Under stones among salt-grass, between tide-marks at Sea Cliff, N. Y. It is easily separated from *T. sericeum* by the shorter third joint of palpus, and from *T. pacificum* by the less pyriform body and the finer hairs. It feeds on the maritime coccid *Ripersia*.

Ottonia granulosa nov. sp.—Length 2 mm., leg iv 1.8 mm. Red, pale beneath between coxae, a pale spot each side above coxa of third leg, venter pale in middle. Legs and palpi pale, legs i and iv reddish in middle; stout, convex, broadest at shoulders, considerably narrowing to the eyes; cephalothorax short and sloping into the dorsum of abdomen without any definite break; dorsal groove short, enlarged at end; eyes sessile, but projecting; above thickly clothed with two sizes of rounded granules, the smaller the most numerous, a few on venter. Legs and palpi clothed with short clavate scales; last joint of leg i a trifle longer than the preceding joint, that of leg iv about as long as penultimate; ventral openings clothed with short fine hair; palpi short, stout, third joint about as long as broad, two claws at tip of fourth joint, the inner one the smaller; there are three equal spines along the outer side, the thumb is longer than claws, cylindrical and blunt-tipped, clothed with fine hair.

Four specimens, Punta Gorda, Fla. (Mrs. A. T. Slosson).

Ottonia trombidiodes nov. sp.—Length 2 mm., leg iv 1.6 mm. Red above, pale beneath, the pale extending up on sides near the middle, legs and palpi pale; stout, the sides nearly parallel or slightly tapering, more slender than *O. granulosa*; cephalothorax small, separated from dorsum of abdomen by a distinct break; a transverse impression near the middle of body and several smaller ones in front; at the tip above is an impressed triangular plate, similar to *O. loenstarum*. Legs short, but not very stout, last joint of leg i plainly longer than penultimate, last joint of iv as long as penultimate. Body clothed with appressed narrow scales, finer on venter; legs and palpi with still narrower scales, almost hairs; palpi stout, third joint as broad as long; two claws at the tip of fourth joint, the inner the smaller, on outer edge three stout, equal spines; thumb cylindrical, blunt-tipped, with fine hairs.

Two specimens, Punta Gorda, Fla. (Mrs. A. T. Slosson).

Rhyncolophus floridaanus nov. sp.—Length 2 mm., leg iv 2 mm. Above black, with a pale (red in life) median spot in front; a large oblique spot each side, uniting just behind the dorsal groove, then continuing as a median stripe toward the apex, which it does not reach; a larger median spot at apex; leg i blackish, except apical joints; legs ii and iii pale, indistinctly ringed with black at the tips of the joints; leg iv blackish in middle; venter pale. Body slender, three times as long as broad, slightly constricted at third legs; dorsal groove reaching to near middle, enlarged at each end; last joint of leg i a little shorter than the preceding joint, last joint of leg iv about two-thirds as long as the preceding joint.

One specimen, Punta Gorda, Fla. (Mrs. A. T. Slosson).

Smaris australis nov. sp.—Length 1.1 mm. Pale yellowish; body oblong, with a rounded snout in front, which bears above six eyes in the usual arrangement. Body covered with a network of fine hairs, at the intersections arise very short curved stiff bristles; above two rows of five small depressions. Legs

very short, not as long as the breadth of body, clothed with fine short bristles; last joints of legs i and iv about as long as the penultimate and slightly enlarged at tips; mouth-parts retracted; genital opening once its length in front of the smaller anal opening.

One specimen, Punta Gorda, Fla. (Mrs. A. T. Slosson).

Bdella tenella nov. sp.—Length .6 mm. Pale reddish, irregularly mottled with blackish; four or five elongate pale stripes on the cephalothorax; abdomen marked with blackish, darkest on the sides, paler below; legs whitish hyaline; mandibles and palpi reddish. Mandibles very long and slender over once and one-half as long as the cephalothorax, with two bristles above on each side; second joint of palpi about three-fourths as long as the mandibles; third and fourth very short; fifth about twice as long as broad, not one-third as long as the second joint, three bristles near the truncate tip, one very short, an outer one as long as the mandibles, and an inner one-half as long; the cephalothorax is broader than long, truncate in front, rounded behind, narrower than the abdomen, a short bristle at each corner. Abdomen about twice as long as broad, concave at base, the shoulders projecting, contracted in the middle and broadly rounded at tip, a short stiff bristle on each shoulder, and about six similar ones around the apex. Legs short and very stout, with some stiff bristles.

Under bark of oak trees, Sea Cliff, N. Y., May. Readily separated from *B. cardinalis* by its mottled appearance and slender form.

Eupodes marinus nov. sp.—Length .35 mm. When alive, bright red in color, in alcohol it becomes greenish, with a pale median stripe on the abdomen, legs hyaline; the cephalothorax is narrower than the abdomen, somewhat triangular, truncate in front, no distinct eyes; mandibles quite prominent, half as long as the cephalothorax; palpi thick and stout, penultimate joint not twice as long as broad, last joint not half as long as the penultimate, pointed, and with several short stiff spines at tip. Abdomen somewhat swollen at shoulders, about once and one-half as long as broad, tapering behind and broadly rounded at tip, above with a few scattered blunt hairs, a longer one on each shoulder and about a dozen at tip. Legs short, with fine hairs; leg i the longest, but plainly shorter than the body, femur i not quite as long as the cephalothorax, is broadest at base about equal to the femur plus patella ii; femur iv thickened as usual in the genus.

Running over rocks between tide-marks at Sea Cliff, N. Y. It has shorter legs and stouter palpi than *E. variabilis*. I have seen a few specimens which are a little larger, and are covered with small black spots, but I am not sure that they form a different species.

Oribatella perfecta nov. sp.—Length .45 mm. Reddish brown, a pale spot at base of abdomen above, legs yellowish; tectal plate short, broadly cleft in front, tip of each projection slightly truncate and giving rise to a long stiff bristle, superior bristles long, sub-erect; each side under the tectal plate there is a short elevation bearing a stout curved bristle in front; setae very short, thick and clavate, not half the length of the superior bristles. Abdomen depressed, convex, finely granulate, with about twenty-five bristles above, all shorter than the bristles of the cephalothorax; no small spots visible. Wings long, triangular, rounded below, venter with a few scattered short hairs; genital opening once

and a half its length in front of the larger anal opening: coxal plate with three short lines each side. Legs moderate, hairy, a curved plate behind the first femora.

Many specimens swept from low herbage in May at Pine Island near Bayville, N. Y. Also one from Norfolk, Va., collected by Capt. Thos. L. Casey. Related to *O. bidentata* and *O. obesa*, but separated by the thick setæ, shape of wings, and unspotted abdomen.

Oribatella minuta nov. sp.—Length .3 mm. Pale reddish brown, legs paler, a pale spot at base of abdomen; setæ, bristles and hairs white. Body quite high, globose; tectal plate short and broad, divided into four spine-like processes in front, the median pair quite close together and smaller (but not shorter) than the outer ones; between the inner and outer spine on each side arises a very stout anterior bristle, about as thick as the median processes of the tectal plate and plainly longer; superior bristles as large as anterior pair, projecting forward; on each side of the tip of cephalothorax is a stout curved bristle, which, on its outer side, bears a row short hairs; setæ not very short, clavate. Abdomen finely punctulate. Wings large, deep, somewhat pointed and incurved at tip; above on the abdomen there are about twenty fine curved hairs, about as long as the setæ; venter granulate, genital opening more than its length in front of the slightly larger anal opening; coxal plate transversely divided. Legs short, finely haired, those on outside of the patellæ and tibiæ are much thicker than the others.

One specimen, under hemlock bark, Sea Cliff, N. Y., March.

Belba floridana nov. sp.—Length .6 mm. Yellowish brown, a median dark mark on the base of the abdomen; cephalothorax triangular; two pairs of anterior bristles; superior bristles erect, fully twice as long as the short clavate setæ. Abdomen elliptical, convex, smooth, with about eighteen bristles above; venter smooth, genital opening about once and one-half its length in front of the larger anal opening; coxæ as in *B. minuta*.

Punta Gorda, Fla. (Mrs. A. T. Slosson). Closely related to *B. minuta*, but larger, and the short setæ not half so long as the bristles of abdomen.

Eremæus marginalis nov. sp.—Length .4 mm. Dark brown; cephalothorax triangular, rounded in front, with two short curved hairs at tip, with numerous ridges above and the outline of a trapezium in the center, a plate-like projection behind coxæ i, a spine-like projection behind coxæ ii; setæ very short, strongly capitate. Abdomen depressed, about once and a half as long as broad, elliptical, with a broad membranous margin, which is strongly striated; above with many irregular intersecting ridges; below granulate, the genital opening about two-thirds its length in front of the larger anal opening; coxal plate transversely divided. Legs very short, femora thickened, with only a few short hairs; on the penultimate joint of the anterior pair there is a projection bearing a longer hair at tip; from the side a few very short stiff hairs can be seen on the dorsum.

Numerous specimens found clustered under lichens on the bark of apple trees in March, at Sea Cliff, N. Y. Some young specimens are pale, with a transversely striated abdomen, and a row of several spatulate hairs at the tip.

Carabodes brevis nov. sp.—Length .4 mm. Dark red-brown, legs yellowish; the cephalothorax has an elevated plate-like ridge each side, and in the middle a long triangular elevated region, the sides of which are concave; four short, stiff, curved bristles in front, and two much longer ones near the base, each strongly curved toward the middle line; setæ short, capitate. Abdomen a little longer than broad, truncate at base and broadly rounded at tip; strongly pitted, or rather with a fine network of ridges, bearing about twenty-two stiff curved bristles about as long as the setæ, two submedian rows of four each, a lateral row of three, four on each posterior side, those near the base almost clavate, but those on sides simple; venter pitted like the dorsum; the genital opening fully its length in front of the larger anal opening; some short curved hairs on venter; outlines of the coxæ distinct and not forming a plate, roughened. Legs short, joints slightly fusiform, with simple hairs, some near the tips quite long.

Four specimens shaken from a dead fungus (*Polyporus*) in May, at Sea Cliff, N. Y. Related to *C. granulatus*, but differs in having simple hairs on the sides of the abdomen.

Carabodes dorsalis nov. sp.—Length .45 mm.—Pale brownish yellow; cephalothorax triangular, convex, with the outlines of a broad T-mark; two short anterior bristles, a pair of longer, appressed, superior bristles; setæ erect, moderate, clavate. Abdomen once and one-half longer than broad, sides nearly parallel, broadly rounded behind, not high, coarsely but evenly granulate above and below; on dorsum each side a lateral and a submedian row of four large stiff, curved, appressed, simple bristles, longer than the setæ; genital opening nearly once its length in front of the larger anal opening; coxæ separate. Legs short and very stout, some joints as broad as long, with very short spine-like bristles.

Three specimens taken from the surface of a large boulder, in the woods, near Sea Cliff, N. Y. General appearance of *C. apicalis*, but differs in more slender form, stouter legs, etc.

Nothrus (?) marinus nov. sp.—Length .9 mm. Black, sides of abdomen and tips of legs yellowish; cephalothorax triangular, the tip striated, a narrow oblong bridge appears to connect the base to the abdomen, its anterior tip is terminated by a ridge, each side of this on the cephalothorax there extends obliquely backward a curved ridge; apparently no setæ. Abdomen elliptical, high, smooth, but not shining, with some scattered, very short, sometimes almost clavate hairs; venter smooth, the genital opening distinctly separated from the larger anal opening; coxæ marked by incomplete lines. Legs much shorter than the body, with stiff, pointed bristles, a few finer ones near tips of tarsi, three claws, the middle one distinctly the largest, none of the joints of the legs swollen, except femora i, which are somewhat stouter than the others.

Not uncommon on rocks between tide-marks, Sea Cliff, N. Y. This is not a *Nothrus*, but nearer to it than to any other genus known to me. It will not agree with *Damvus*. Most of the specimens are young and have the abdomen transversely striate.